Product Evaluation

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-522

Effective Date: December 1, 2016
Re-evaluation Date: December 2020

Product Name: Minimum 24-Gauge Ultra-Dek Steel Standing Seam Roofing Panels Installed over Steel Purlins

Manufacturer: Metal Building Components, Inc. (MBCI), L.P., a division of NCI, L.P.
14031 West Hardy
Houston, TX 77060
(281) 445-8555

General Description:
The Ultra-Dek metal standing seam roofing panel is minimum 24-gauge, coated steel. The 24-gauge panel has an actual coverage of 24". The metal roof panels have a 3" rib height. The panel conforms to ASTM A 653 G90 galvanized. The panels have a minimum yield strength of 50,000 psi.

Limitations:
Roof Framing: Install the metal roofing panels over open steel purlins.

New Roof Framing Attachment: The roof framing must meet or exceed the uplift requirements of the IRC or IBC. Install as required for resistance to wind loads.

Design Wind Pressures: Table 1 specifies the design pressure uplift load resistance.

Roof Slope: The minimum roof slope is 1/4:12.

Installation Over an Existing Roof Covering: Not permitted.

Table 1: Attachment of Minimum 24-gauge Ultra-Dek Metal Roofing Panels to Steel Purlins

Design Wind Pressure (psf)	Purlins	Attachment of Panels to Steel Purlins
-21.3	Minimum 16-gauge; 5'-0" on center	Clips at 60" on center
-50.0	Minimum 16-gauge; 1'-0" on center	Clips at 12" on center

Installation Instructions:

General: Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Steel Purlins: Table 1 specifies the minimum thickness of the steel and maximum spacing of the purlins.

Underlayment: NA

Attachment of Metal Roofing Panels to the Steel Purlins:

Secure the Ultra-Dek metal roofing panels to the steel purlins with HW2100 Low Sliding clips (Clip Base: 2.375" high x 5.00" long x 1.375" wide, 14-gauge, ASTM A 653 G90 galvanized; Clip Tab: 2.925" high x 2.00" wide, 20-gauge, ASTM A A792 Galvalume AZ55). Each clip is secured to the purlins with two (2) 1/4-14-14 x 1-1/4" HWH SD #2 screws. Use fasteners long enough to ensure a minimum penetration of 3-pitches of thread below the steel purlin.

Trims, Closures, and Accessories: Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.